INDEX TO VOLUME XIII

Abell, Elizabeth, and Huddleson, I. Forest. A biochemical method of differentiating *Brucella abortus* from *Brucella melitensis-paramelitensis*. Abstract..... 13

Acetyl-methyl-carbinol, The destruction of, by members of the colon-aerogenes group..... 269

Acid-tolerant bacterium, An, causing the rotting of silage. Abstract..... 65

Adaptation, An, of the Chambers microdissection apparatus for the isolation of single bacterial cells. Abstract..... 15

Albus, W. R. Gassy fermentation in processed Swiss cheese containing pimentos. Abstract..... 66

——. The effect of sodium ricinoleate as a surface tension depressant upon the growth of *Bacterium coli*. Abstract..... 7

Allen, Paul W., Cameron, George M., and Cole, William E. The fixation of the bacteria in market milk samples. Abstract..... 63

——, Cole, William E., and Cameron, George M. A basic factor in the control of white diarrhea. Abstract..... 68

——, Cole, William E., and Cameron, George M. The reduction of bacteria in mountain streams. Abstract..... 68

Anaerobes, Sugar as a source of the, causing explosion of chocolate candies.... 203

Anaerobiosis produced by means of a central catalyzing station..... 227

Anaphylaxis. Studies V. Allergic responses of the embryonic chicken heart. Abstract..... 38

——. Studies VI. Passive sensitization of turtles and guinea pigs using immune serum from chickens and rabbits. Abstract..... 39

——. Studies VII. Active anaphylaxis in turtles. Abstract..... 39

Anderson, J. A., Fred, E. B., and Peterson, W. H. Certain fermentation products of the root nodule bacteria of legumes. Abstract..... 54

Animal passage, The influence of anti-serum and of, upon the virulence and electrophoresis of pneumococci..... 191

Antigenic studies on *Salmonella gallinarum* and *Salmonella pullorum*, Cultural and..... 129

Anti-serum, The influence of, and of animal passage upon the virulence and electrophoresis of pneumococci. Studies on respiratory diseases XXIX.. 191

Antivenin specificity. Abstract..... 48

Apparatus suggestions: (Demonstration), (1) Test tube plugs, (2) Semi-porous petri dishes, and (3) Centimeter counters. Abstract..... 5

Are certain of the ultraviruses, so-called, filterable stages in the life cycle of ordinary bacteria? Abstract..... 28

Aycock, W. L., and Kagan, J. R. Experimental immunization in poliomyelitis. Abstract..... 28

B. coli, Can, be used as an index of the proper pasteurization of milk?..... 419
—— in water, Irregularities in the test for..... 209
Bacillus, The, of swine erysipelas causing a distinctive and severe form of erysipeloid among fish handlers. Abstract..... 32
Bacteria, Aerobic, commonly concerned in the decomposition of cellulose, Studies on..... 321
—— in the supposedly sterile meconium. Abstract..... 47
—— prevalent in sweetcorn canning..... 409
——, the paratyphoid B—suipestifer group of. Studies in differentiation..... 73
——, The viability of various species of, in aqueous suspensions..... 235
Bacterial development, The relation of surface tension to..... 387
—— growth, Interfacial tension and..... 381
—— metabolism. The influence of phosphate buffer in sugar-free and in glucose-containing media. Abstract..... 10
Bacteriologic, A, study of the Spanish green olive. Abstract..... 56
—— taxonomy, Some fallacious tendencies in..... 245
Bacteriology as a cultural subject. Abstract..... 70
Bacteriophage active against a thermophilic bacillus. Abstract..... 14
Bacterium, A type of urea-splitting, found in the human intestinal tract..... 315
Bailey, Sadie F., and Lacy, George R. Modification, A, of the Kligler lead acetate medium..... 183
Baldwin, I. L., and Fred, E. B. The fermentation characters of the legume nodule bacteria. Abstract..... 49
Basic, A, factor in the control of white diarrhea. Abstract..... 68
Batchelor, Harold W., and Curie, Irvin H. Use of dyes in media for the identification of soil microörganisms. Preliminary note on their use in the isolation of the root-nodule bacteria of legumes. Abstract..... 53
Bates, P. K., and Prescott, S. C. Preliminary studies on the microbiology of manila hemp. Abstract..... 67
Beerman, Philip, and Kopeloff, Nicholas. Surface tension studies with *L. acidophilus* and *L. bulgaricus*. Abstract..... 7
Behrens, Charles A. Efficient production of agglutinins. Abstract..... 46
Bergey, D. H. Diabetes mellitus: An experimental study on the etiology of the disease. (Preliminary Report.) Abstract..... 29
——. Method of conducting a course in general bacteriology. Abstract... 69
Bibb, Lewis B. Differentiation of intestinal organisms by means of semi-fluid sugar media..... 123
Biochemical, A, method of differentiating *Brucella abortus* from *Brucella melitensis-paramelitensis*. Abstract..... 13
Blood-clot, A, digest medium for cultivation of hemophilic and other bacteria. Abstract..... 14
Blood-red, A, yeast from milk. Abstract..... 58
Boëz, L. Anaerobiosis produced by means of a central catalyzing station..... 227
Bradley, Leon A., and Rettger, Leo F. Studies on aerobic bacteria commonly concerned in the decomposition of cellulose..... 321
Brainard, D. H., Noble, W. C., Jr., and Fisher, E. A. Studies of the etiology of the common cold. Abstract..... 33

Branham, Sara E. A study of some anaerobic microörganisms found in nasopharyngeal washings. Abstract..... 3
——, and Humphreys, Eleanor M. Observations on the soluble antigens of *Bacterium enteritidis*. Abstract..... 46
Breed, Robert S., and Pederson, Carl S. The preservative action in catsup of salt, sugar, benzoate and acid. Abstract..... 59
Broadhurst, Jean. Apparatus suggestions: (Demonstration), (1) Test Tube Plugs, (2) Semi-Porous Petri Dishes, and (3) Centimeter counters. Abstract..... 5
——. Bacteriology as a cultural subject. Abstract..... 70
——, and Güll, Jean. Potato utilization as indicated by hydrogen peroxide. Abstract..... 4
Brooke, Olive R., and Winslow, C.-E. A. The viability of various species of bacteria in aqueous suspensions..... 235
Brown, J. Howard, and Frobisher, Martin, Jr. A study of the toxicogenic properties of some streptococci. Abstract..... 44
Brush, Anna C. A blood-red yeast from milk. Abstract..... 58
Buchanan, R. E. The taxonomy of the legume bacteria. (No abstract)... 50
Burrage, Severance. Bacteria in the supposedly sterile meconium. Abstract..... 47

Cameron, E. J., Williams, C. C., and Thompson, R. J. Sources of thermophilic contamination in the canning of peas and corn. Abstract..... 64
Cameron, George M., Allen, Paul W., and Cole, William E. A basic factor in the control of white diarrhea. Abstract..... 68
——, Allen, Paul W., and Cole, William E.. The reduction of bacteria in mountain streams. Abstract..... 68
——, Cole, William E., and Allen, Paul W. The fixation of the bacteria in market milk samples. Abstract..... 63
Can *B. coli* be used as an index of the proper pasteurization of milk?..... 419
Card, L. E., and Roberts, E. Genetic studies on resistance to bacterial infection. Abstract..... 31
Carroll, W. R., and Sears, O. H. Cross inoculation studies with cow pea and soy bean nodule bacteria. Abstract..... 55
Catalyzing station, Anaerobiosis produced by means of a central..... 227
Cellulose, Studies on aerobic bacteria commonly concerned in the decomposition of..... 321
Certain fermentation products of the root nodule bacteria of legumes. Abstract..... 54
Chocolate candies, Sugar as a source of the anaerobes causing explosion of.... 203
Cole, William E., Allen, Paul W., and Cameron, George M. A basic factor in the control of white diarrhea. Abstract..... 68
——, Allen, Paul W., and Cameron, George M. The fixation of the bacteria in market milk samples. Abstract..... 63
——, Allen, Paul W., and Cameron, George M. The reduction of bacteria in mountain streams. Abstract..... 68
Colon-aerogenes group, The destruction of acetyl-methyl-carbinol by members of the..... 269

Conn, H. J. Studies on the general soil flora. Abstract..... 51
Consideration of methods in the teaching of general bacteriology. Abstract..... 69
Cooke, J. V., and Keith, Hazel Reed. A type of urea-splitting bacterium found in the human intestinal tract..... 315
Course, The, of nitrate accumulation in soils following the growth of crops. Abstract..... 50
Cowdry, E. V. The nature and significance of cellular inclusion bodies in diseases due to filterable viruses. Abstract..... 20
Cross inoculation studies with cow pea and soy bean nodule bacteria. Abstract..... 55
Cultural and antigenic studies on *Salmonella gallinarum* and *Salmonella pullorum*..... 129
Curie, Irvin H., and Batchelor, Harold W. Use of dyes in media for the identification of soil microörganisms. Preliminary note on their use in the isolation of the root-nodule bacteria of legumes. Abstract..... 53

Dack, Gail M., Starin, W. A., and Werner, Marie. Study of the growth of *Cl. botulinum* and *Cl. sporogenes* in veal infusion broth under reduced pressures. Abstract..... 1
Davenport, C. K., and Gilbert, Ruth. Failure of the mouse test to demonstrate the presence of Type I pneumococcus in sputum. An unusual instance. Abstract..... 35
Davis, Neal. Interfacial tension and bacterial growth..... 381
Destruction, The, of acetyl-methyl-carbinol by members of the colon-aerogenes group..... 269
Diabetes mellitus: an experimental study on the etiology of the disease. (Preliminary report.) Abstract..... 29
Differentiation of intestinal organisms by means of semifluid sugar media.. 123
Differentiation, Studies in. The paratyphoid B—suipestifer group of bacteria..... 73
Disinfectants, Studies upon the relationship between surface tension and the action of, with special reference to hexylresorcinol..... 163
Do Amaral, Afranio. Antivenin specificity. Abstract..... 48
Doelger, W. E. P., and Prescott, S. C. Studies on the bacteriology of rubber latex. Abstract..... 67
Downs, C. M. Anaphylaxis. Studies VII. Active anaphylaxis in turtles. Abstract..... 39
Downs, C. M., and Sherwood, Noble P. Anaphylaxis. Studies VI. Passive sensitization of turtles and guinea pigs using immune serum from chickens and rabbits. Abstract..... 39
Dubos, René J. Influence of environmental factors on the activities of aerobic bacteria concerned in the decomposition of cellulose in soils. Abstract..... 52
Dutton, L. O. The occurrence of bacteriophage and variation in streptococcus colony formation. Abstract..... 43
——. The rôle of the bacteriophage in streptococcus infections. III. As a factor in the recovery from infection. Abstract..... 44

Edwards, Philip R., and Rettger, Leo F. The paratyphoid B—suipestifer group of bacteria. Studies in differentiation..... 73
Effect, The, of bacterial cells upon the chemical composition of the surrounding menstruum as influenced by the presence of various electrolytes. Abstract..... 8
Effect, The, of sodium ricinoleate as a surface tension depressant upon the growth of *Bacterium coli*. Abstract..... 7
Efficient production of agglutinins. Abstract..... 46
Electrophoresis of penumococci, The influence of anti-serum and of animal passage upon the virulence and. Studies on respiratory diseases, XXIX. 191
Ellis, M. G., Hill, J. H., Seidman, L. R., and Stadnichenko, A. M. S. A preliminary study of two hundred gram negative bacilli isolated from cases of genito-urinary infection. Abstract..... 6
Essential food substances in soil..... 113
Evans, Alice C. Virulent streptococci and spore forming rods cultivated from so-called herpetic and encephalitis viruses. Abstract..... 27
Evolution, The, of *B. radiobacter* from mixed cultures of *B.* and *Pseudomonas radicicola*. Abstract..... 43
Experimental immunization in poliomyelitis. Abstract..... 28
Explosion of chocolate candies, Sugar as a source of the anaerobes causing... 203

Failure of the mouse test to demonstrate the presence of Type I pneumococcus in sputum. An unusual instance. Abstract..... 35
Falk, I. S., and Jacobson, M. A. Studies on respiratory diseases. XXIX. The influence of anti-serum and of animal passage upon the virulence and electrophoresis of pneumococci..... 191
Fay, A. C. Thermo-tolerant organisms as a cause of so-called pin-point colonies..... 347
Fermentation, The, characters of the legume nodule bacteria. Abstract..... 49
Filterable viruses—A critical review. Abstract..... 16
Fisher, E. A., Noble, W. C., Jr., and Brainard, D. H. Studies of the etiology of the common cold. Abstract..... 33
Fixation, The, of the bacteria in market milk samples. Abstract..... 63
Food, Essential, substances in soil..... 113
Fred, E. B., Anderson, J. A., and Peterson, W. H. Certain fermentation products of the root nodule bacteria of legumes. Abstract..... 54
——, and Baldwin, I. L. The fermentation characters of the legume nodule bacteria. Abstract..... 49
Frobisher, Martin, Jr. Studies upon the relationship between surface tension and the action of disinfectants, with special reference to hexylresorcinol... 163
——, and Brown, J. Howard. A study of the toxicogenic properties of some streptococci. Abstract..... 44
Frost, W. D., Gumm, Mildred, and Thomas, Robert C. The types of hemolytic streptococci in certified milk. Abstract..... 61
Functional and morphological changes in the life history of dermacentroxenus Rickettsi Wolbach, the causative agent of Rocky Mountain spotted fever. Abstract..... 42
Fusiform bacilli, The serological classification of..... 275

Gassy fermentation in processed Swiss cheese containing pimentos. Abstract..... 66
Genetic studies on resistance to bacterial infection. Abstract..... 31
Genung, Elizabeth F. Teaching bacteriology in a college of liberal arts. Abstract..... 69
Gilbert, Ruth, and Davenport, C. K. Failure of the mouse test to demonstrate the presence of Type I pneumococcus in sputum. An unusual instance. Abstract..... 35
Goodner, Kenneth, and May, Henry C. Cultural and antigenic studies on *Salmonella gallinarum* and *Salmonella pullorum*..... 129
Grinnell, Francis B., and Zinsser, Hans. Studies of bacterial allergy with the pneumococcus. Abstract..... 30
Grouping, The, of different strains of *Pseudomonas radicicola* of Soja Max according to the bacteriostatic effect of the pararosanilin dyes. Abstract..... 54
Güll, Jean, and Broadhurst, Jean. Potato utilization as indicated by hydrogen peroxide. Abstract..... 4
Gumm, Mildred, Frost, W. D., and Thomas, Robert C. The types of hemolytic streptococci in certified milk. Abstract..... 61

Hadley, Philip. Microbic dissociation and the mutation myth. Abstract..... 41
——. The rôle of homologous immune serum in microbic dissociation. Abstract..... 40
Hall, Ivan C. The isolation of pathogenic anaerobes from African poisoned arrows. Abstract..... 2
——. Some fallacious tendencies in bacteriologic taxonomy..... 245
Halvorson, H. O., and Starkey, R. L. The importance of some heterotrophic microörganisms in the solution and precipitation of iron. Abstract..... 65
Harding, H. G., and Wright, William H. A modification of the Brown apparatus for the determination of colorimetric pH. Abstract..... 10
Harkins, Malcolm J. The bacillus of swine erysipelas causing a distinctive and severe form of erysipeloid among fish handlers. Abstract..... 32
——, Kolmer, John A., and Schamberg, Jay F. A study of the so-called "specific factor" (Gye) of chicken sarcoma (Rous). Abstract..... 26
Hastings, E. G., and Thornton, H. R. Some aspects of the methylene blue reduction test of milk. Abstract..... 62
——, and Mansfield, Harriet L. An acid-tolerant bacterium causing the rotting of silage. Abstract..... 65
Hexylresorcinol, Studies upon the relationship between surface tension and the action of disinfectants, with special reference to..... 163
Hill, J. H., Seidman, L. R., Stadnichenko, A. M. S., and Ellis, M. G. A preliminary study of two hundred gram negative bacilli isolated from cases of genito-urinary infection. Abstract..... 6
How accurate is the quantitative plate count? Abstract..... 63
Huddleson, I. Forest, and Abell, Elizabeth. A biochemical method of differentiating *Brucella abortus* from *Brucella melitensis-paramelitensis*. Abstract..... 13

Humphreys, Eleanor M., and Branham, Sara E. Observations on the soluble antigens of *Bacterium enteritidis*. Abstract..... 46
Hunter, Charles A. Consideration of methods in the teaching of general bacteriology. Abstract..... 69
Hunter, Oskar. The use of the short answer type of questions in bacteriology examinations. Abstract..... 70

Importance, The, of some heterotrophic microörganisms in the solution and precipitation of iron. Abstract..... 65
Influence of environmental factors on the activities of aerobic bacteria concerned in the decomposition of cellulose in soils. Abstract..... 52
Interfacial tension and bacterial growth..... 38
Interpretation, The, of changes in electrical resistance accompanying the death of cells. Abstract..... 9
Intestinal organisms, Differentiation of, by means of semi-fluid augar media.. 123
Irregularities in the test for *B. coli* in water..... 209
Isolation, The, of pathogenic anaerobes from African poisoned arrows. Abstract..... 2
Izard, Miriam S. The value of lactic acid in the preservation of mayonnaise dressing and other products. Abstract..... 57

Jacobson, M. A. Observations on the epidemiology of lobar pneumonia. Abstract..... 31
——, and Falk, I. S. Studies on respiratory diseases. XXIX. The influence of anti-serum and of animal passage upon the virulence and electrophoresis of pneumococci..... 191
James, Lawrence H. Bacteria prevalent in sweetcorn canning..... 409
Jones, Dan H. The viability of *Rhizobium legumenosum* Frank and *Rhizobium radicicolum* Beijerinck. Abstract..... 55

Kagan, J. R., and Aycock, W. L. Experimental immunization in poliomyelitis. Abstract..... 28
Kahn, R. L., McDermott, Elizabeth, and Nagle, Nathan. Relation between appearance of precipitate and potency of serum in Kahn reaction. Abstract..... 37
——, and Nagle, Nathan. Studies on standardization of antigen for Kahn test. Abstract..... 36
Keith, Hazel Reed, and Cooke, J. V. A type of urea-splitting bacterium found in the human intestinal tract..... 315
Kligler lead acetate medium, A modification of the..... 183
Kolmer, John A., Harkins, Malcolm J., and Schamberg, Jay F. A study of the so-called "specific factor" (Gye) of chicken sarcoma (Rous). Abstract..... 26
Kopeloff, Nicholas, and Beerman, Philip. Surface tension studies with *L. acidophilus* and *L. bulgaricus*. Abstract..... 7
Koser, Stewart A. Bacteriophage active against a thermophilic bacillus. Abstract..... 14
Kunkel, L. O. Some characteristics of virus diseases of plants. Abstract.... 23

Lacy, George R., and Bailey, Sadie F. A modification of the Kligler lead acetate medium..... 183
Lead acetate medium, A modification of the Kligler..... 183
Light, A, switch for the microscope..... 223
Limiting factors in the lactic fermentation. Abstract..... 10
Little, John T., McDonald, James F., and Ruckensteiner, Ernst. A study in bacterial morphology..... 255
Lyon, T. L. The course of nitrate accumulation in soils following the growth of crops. Abstract..... 50

Mansfield, Harriet L., and Hastings, E. G. An acid-tolerant bacterium causing the rotting of silage. Abstract..... 65
Marshall, Charles Edward. 1866–1927. Obituary..... 379
May, Henry G., and Goodner, Kenneth. Cultural and antigenic studies on *Salmonella gallinarum* and *Salmonella pullorum*..... 129
McAlpine, James G., and Slanetz, Charles A. Studies on the metabolism of the Bact. abortus-melitensis bronchisepticum-alcaligines group. 1. Nitrogen metabolism. Abstract..... 11
McCoy, Elizabeth F., and Wright, William H. An adaptation of the Chambers microdissection apparatus for the isolation of single bacterial cells. Abstract..... 15
McDermott, Elizabeth, Kahn, R. L., and Nagle, Nathan. Relation between appearance of precipitate and potency of serum in Kahn reaction. Abstract..... 37
McDonald, James F., Little, John T., and Ruckensteiner, Ernst. A study in bacterial morphology..... 255
Medicine and the public health, Problems of the bacteriologist in his relations to..... 147
Mellon, Ralph R. Are certain of the ultraviruses, so-called, filterable stages in the life cycle of ordinary bacteria? Abstract..... 28
——. Studies in microbic heredity. XII. Microbic dissociation in vivo as illustrated by a case of subacute septicopyemia..... 99
Method of conducting a course in general bacteriology. Abstract..... 60
Microbic dissociation and the mutation myth. Abstract..... 41
—— dissociation in *B. subtilis*. Abstract..... 41
—— dissociation in vivo as illustrated by a case of subacute septicopyemia. Studies in microbic heredity. XII..... 99
Microbic heredity, Studies in. XII. Microbic dissociation in vivo as illustrated by a case of subacute septicopyemia..... 99
Microscope, A light switch for the..... 223
Milk, Can *B. coli* be used as an index of the proper pasteurization of?..... 419
Modification, A, of the Brown apparatus for the determination of colorimetric pH. Abstract..... 10
Modification, A, of the Kligler lead acetate medium..... 183
Morikawa, K., and Prescott, S. C. A new fermentation yielding butyl and isopropyl alcohols. Abstract..... 58
Mouse, The, as a test object for the herpetic virus. (No abstract)..... 26
Mudge, C. S. A light switch for the microscope..... 223

Mueller, J. Howard. The virus problem in transplantable tumors. Abstract..... 26

Nagle, Nathan, and Kahn, R. L. Studies on standardization of antigen for Kahn test. Abstract..... 36
——, and McDermott, Elizabeth. Relation between appearance of precipitate and potency of serum in Kahn reaction. Abstract..... 37
Nature, The, and significance of cellular inclusion bodies in diseases due to filterable viruses. Abstract..... 20
——, The, of soil organic matter and the rôle of microörganisms in its formation and decomposition. Abstract..... 50
New, A, fermentation yielding butyl and isopropyl alcohols. Abstract..... 58
Noble, W. C., Jr., Fisher, E. A., and Brainard, D. H. Studies of the etiology of the common cold. Abstract..... 33

Observations on the epidemiology of lobar penumonia. Abstract..... 31
Observations on the soluble antigens of *Bacterium enteritidis*. Abstract..... 46
Occurrence, The, of bacteriophage and variation in streptococcus colony formation. Abstract..... 43
On the cultural characteristics of *Lactobacillus acidophilus*. Abstract..... 4
Oppenheimer, E. H. Studies on vaccinia virus. Abstract..... 24

Paine, Frederick S. The destruction of acetyl-methyl-carbinol by members of the colon-aerogenes group..... 269
Paratyphoid B—suipestifer, The, group of bacteria. Studies in differentiation..... 73
Parker, Milton E. The use of the blood agar plate in a large certified milk dairy. Abstract..... 61
Parsons, L. B., and Sturges, W. S. Quantitative aspects of the protein metabolism of *C. putrefaciens* (McBryde). Abstract..... 3
Pasteurization of milk, Can *B. coli* be used as an index of the proper?..... 419
Pederson, Carl S., and Breed, Robert S. The preservative action in catsup, of salt, sugar, benzoate and acid. Abstract..... 59
Peterson, W. H., Anderson, J. A., and Fred, E. B. Certain fermentation products of the root nodule bacteria of legumes. Abstract..... 54
Pin-point colonies, Thermo-tolerant organisms as a cause of so-called..... 347
Pizarro, Orsino R. The relation of surface tension to bacterial development.. 387
Pneumococci, The influence of anti-serum and of animal passage upon the virulence and electrophoresis of. Studies on respiratory diseases XXIX..... 191
Potato utilization as indicated by hydrogen peroxide. Abstract..... 4
Pratt, Josephine S. A study of the biology of *B. fusiformis*. Abstract..... 35
Preliminary, A, study of two hundred gram negative bacilli isolated from cases of genito-urinary infection. Abstract..... 6
Preliminary studies on the microbiology of manila hemp. Abstract..... 67
Prescott, S. C., and Bates, P. K. Preliminary studies on the microbiology of manila hemp. Abstract..... 67

Prescott, S. C., and Doelger, W. E. P. Studies on the bacteriology of rubber latex. Abstract..... 67
——, and Morikawa, K. A new fermentation yielding butyl and isopropyl alcohols. Abstract..... 58
——, and Riley, P. L. The specific resistance of bacteria to soap solutions. Abstract..... 66
Preservative, The, action in catsup of salt, sugar, benzoate and acid. Abstract..... 59
Problems of the bacteriologist in his relations to medicine and the public health..... 147
Public health, Problems of the bacteriologist in his relations to medicine and the..... 147

Quantitative aspects of the protein metabolism of *C. putrefaciens* (McBryde). Abstract..... 3
Quantitative, The, and qualitative distribution of lactobacilli in milk. Abstract..... 60

Recent research on foot-and-mouth disease, with special reference to the work of the American Commission. Abstract..... 21
Reduction, The, of bacteria in mountain streams. Abstract..... 68
Relation between appearance of precipitate and potency of serum in Kahn reaction. Abstract..... 37
Relation, The, of surface tension to bacterial development..... 387
Relationship, The, between the hydrogen ion concentration of egg white and the growth of anaerobes. Abstract..... 59
Respiratory diseases, Studies on. XXIX. The influence of antiserum and of animal passage upon the virulence and electrophoresis of pneumococci. 191
Rettger, Leo F., and Bradley, Leon A. Studies on aerobic bacteria commonly concerned in the decomposition of cellulose..... 321
——, and Edwards, Philip R. The paratyphoid B—suipestifer group of bacteria. Studies in differentiation..... 73
——, and Slanetz, Charles A. Bacterial metabolism. The influence of phosphate buffer in sugar-free and in glucose-containing media. Abstract..... 10
Richmond, Thomas E. The evolution of *B. radiobacter* from mixed cultures of *B.* and *Pseudomonas radicicola*. Abstract..... 43
Riley, P. L., and Prescott, S. C. The specific resistance of bacteria to soap solutions. Abstract..... 66
Rivers, T. M. Filterable viruses—A critical review. Abstract..... 16
Roberts, E., and Card, L. E. Genetic studies on resistance to bacterial infection. Abstract..... 31
Rogers, L. A., and Whittier, E. O. Limiting factors in the lactic fermentation. Abstract..... 10
Rôle, The, of homologous immune serum in microbic dissociation. Abstract..... 40
Rôle, The, of the bacteriophage in streptococcus infections. III. As a factor in the recovery from infection. Abstract..... 44

Roos, C. On the cultural characteristics of *Lactobacillus acidophilus*. Abstract.... 4
Ruckensteiner, Ernst, McDonald, James F., and Little, John T. A study in bacterial morphology.... 255

Salmonella gallinarum and *Salmonella pullorum*, Cultural and antigenic studies on.... 129
Salmonella pullorum, Cultural and antigenic studies on *Salmonella gallinarum* and.... 129
Sanborn, J. R. Essential food substances in soil.... 113
Schamberg, Jay F., Kolmer, John A., and Harkins, Malcolm J. A study of the so-called "specific factor" (Gye) of chicken sarcoma (Rous). Abstract.... 26
Schoening, Harry W. Recent research on foot-and-mouth disease, with special reference to the work of the American Commission. Abstract.... 21
Sears, O. H., and Carroll, W. R. Cross inoculation studies with cow pea and soybean nodule bacteria. Abstract.... 55
Seidman, L. R., Hill, J. H., Stadnichenko, A. M. S., and Ellis, M. G. A preliminary study of two hundred gram-negative bacilli isolated from cases of genito-urinary infection. Abstract.... 6
Septicopyemia, Microbic dissociation in vivo as illustrated by a case of subacute septicopyemia. Studies in microbic heredity XII.... 99
Serological, The, classification of fusiform bacilli.... 275
Sharp, Paul Francis. The relationship between the hydrogen ion concentration of egg white and the growth of anaerobes. Abstract.... 59
Shaughnessy, H. J., and Winslow, C.-E. A. The effect of bacterial cells upon the chemical composition of the surrounding menstruum as influenced by the presence of various electrolytes. Abstract.... 8
Sherman, J. M., and Stark, C. N. The quantitative and qualitative distribution of lactobacilli in milk. Abstract.... 60
——, Stark, C. N., and Stark, Pauline W. The influence of diphtheria toxin on the growth of certain bacteria. Abstract.... 45
Sherwood, Noble P. Anaphylaxis. Studies V. Allergic responses of the embryonic chicken heart. Abstract.... 38
——, and Downs, C. M. Anaphylaxis. Studies VI. Passive sensitization of turtles and guinea pigs using immune serum from chickens and rabbits. Abstract.... 39
Simington, Robert M., and Wright, William H. The grouping of different strains of *Pseudomonas radicicola* of Soja Max according to the bacteriostatic effect of the pararosanilin dyes. Abstract.... 54
Simon, Charles E. The mouse as a test object for the herpetic virus. (No abstract).... 26
Slanetz, Charles A., and McAlpine, James G. Studies on the metabolism of the Bact. abortus-melitensis bronchisepticum-alcaligines group. 1. Nitrogen metabolism. Abstract.... 11
——, and Rettger, Leo F. Bacterial metabolism. The influence of phosphate buffer in sugar-free and in glucose-containing media. Abstract.... 10

Smyth, Henry Field. A bacteriologic study of the Spanish green olive. Abstract..... 56
Society of American Bacteriologists, Twenty-eighth Annual Meeting of the.. 1
Soil, Essential food substances in..... 113
Some aspects of the methylene blue reduction test of milk. Abstract..... 62
Some characteristics of virus diseases of plants. Abstract..... 23
Some fallacious tendencies in bacteriologic taxonomy..... 245
Soule, M. H. Microbic dissociation in *B. subtilis*. Abstract..... 41
Sources of thermophilic contamination in the canning of peas and corn. Abstract..... 64
Specific, The, resistance of bacteria to soap solutions. Abstract..... 66
Spencer, R. R. Functional and morphological changes in the life history of dermacent roxenus Rickettsi Wolbach, the causative agent of Rocky Mountain spotted fever. Abstract..... 42
Spray, R. S. A blood-clot digest medium for cultivation of hemophilic and other bacteria. Abstract..... 14
Stadnichenko, A. M. S., Ellis, M. G., Hill, J. H., and Seidman, L. R. A preliminary study of two hundred gram-negative bacilli isolated from cases of genito-urinary infection. Abstract..... 6
Starin, W. A., Dack, Gail M., and Werner, Marie. Study of the growth of *Cl. botulinum* and *Cl. sporogenes* in veal infusion broth under reduced pressures. Abstract..... 1
Stark, C. N., and Sharp, Paul Francis. The relationship between the hydrogen ion concentration of egg white and the growth of anaerobes. Abstract..... 59
——, and Sherman, J. M. The quantitative and qualitative distribution of lactobacilli in milk. Abstract..... 60
——, Sherman, J. M., and Stark, Pauline W. The influence of diphtheria toxin on the growth of certain bacteria. Abstract..... 45
Stark, Pauline W., Stark, C. N., and Sherman, J. M. The influence of diphtheria toxin on the growth of certain bacteria. Abstract..... 45
Starkey, R. L., and Halvorson, H. O. The importance of some heterotrophic microörganisms in the solution and precipitation of iron. Abstract..... 65
Studies in bacterial metabolism: On the selective utilization of amino acids by bacteria. Abstract..... 13
—— in microbic heredity. XII. Microbic dissociation in vivo as illustrated by a case of subacute septicopyemia..... 99
—— of bacterial allergy with the pneumococcus. Abstract..... 30
—— of the etiology of the common cold. Abstract..... 33
—— on aerobic bacteria commonly concerned in the decomposition of cellulose..... 321
—— on respiratory diseases. XXIX. The influence of anti-serum and of animal passage upon the virulence and electrophoresis of pneumococci.... 191
—— on standardization of antigen for Kahn test. Abstract..... 36
—— on the bacteriology of rubber latex. Abstract..... 67
—— on the general soil flora. Abstract..... 51
—— on the metabolism of the Bact. abortus-melitensis-bronchisepticum-alcaligines group. 1. Nitrogen metabolism. Abstract..... 11

Studies on vaccinia virus. Abstract 24
—— upon the relationship between surface tension and the action of disinfectants, with special reference to hexylresorcinol 163
Study, A, of some anaerobic microörganisms found in nasopharyngeal washings. Abstract 3
——, A, of the biology of *B. fusiformis*. Abstract 35
——, A, of the so-called "specific factor" (Gye) of chicken sarcoma (Rous). Abstract 26
——, A, of the toxicogenic properties of some streptococci. Abstract 44
—— of the growth of *Cl. botulinum* and *Cl. sporogenes* in veal infusion broth under reduced pressures. Abstract 1
Sturges, W. S., and Parsons, L. B. Quantitative aspects of the protein metabolism of *C. putrefaciens* (McBryde). Abstract 3
Sugar as a source of the anaerobes causing explosion of chocolate candies 203
Sugar media, Differentiation of intestinal organisms by means of semifluid 123
Surface tension, Studies upon the relationship between, and the action of disinfectants, with special reference to hexylresorcinol 163
—— tension studies with *L. acidophilus* and *L. bulgaricus*. Abstract 7
—— tension, The relation of, to bacterial development 387
Sweetcorn canning, Bacteria prevalent in 409
Swenarton, Joseph C. Can *B. coli* be used as an index of the proper pasteurization of milk? 419
Synthetic media for differentiation of the typhoid-paratyphoid group of bacteria. Abstract 47

Taxonomy, The, of the legume bacteria. (No abstract) 50
Teaching bacteriology in a college of liberal arts. Abstract 69
Thermo-tolerant organisms as a cause of so-called pin-point colonies 347
Thomas, Robert C., Frost, W. D., and Gumm, Mildred. The types of hemolytic streptococci in certified milk. Abstract 61
Thompson, Luther. Synthetic media for differentiation of the typhoid-paratyphoid group of bacteria. Abstract 47
Thompson, R. J., Cameron, E. J., and Williams, C. C. Sources of thermophilic contamination in the canning of peas and corn. Abstract 64
Thompson, Rudolph E. Irregularities in the test for *B. coli* in water 209
Thornton, H. R., and Hastings, E. G. Some aspects of the methylene blue reduction test of milk. Abstract 62
——, and Wright, William H. How accurate is the quantitative plate count? Abstract 63
Treece, E. Lee. Studies in bacterial metabolism: On the selective utilization of amino acids by bacteria. Abstract 13
Twenty-eighth annual meeting of the Society of American Bacteriologists 1
Type, A, of urea-splitting bacterium found in the human intestinal tract 315
Types, The, of hemolytic streptococci in certified milk. Abstract 61

Urea-splitting bacterium, A type of, found in the human intestinal tract 315
Use of dyes in media for the identification of soil microörganisms. Preliminary note on their use in the isolation of the root-nodule bacteria of legumes. Abstract 53

Use, The, of the blood agar plate in a large certified milk dairy. Abstract..... 61
Use, The, of the short answer type of questions in bacteriology examinations. Abstract..... 70

Value, The, of lactic acid in the preservation of mayonnaise dressing and other products. Abstracts..... 57
Varney, Philip L. The serological classification of fusiform bacilli..... 275
Viability, The, of *Rhizobium legumenosum* Frank and *Rhizobium radicicolum* Beijerinck. Abstract..... 55
——, The, of various species of bacteria in aqueous suspensions..... 235
Virulent streptococci and sporeforming rods cultivated from so-called herpetic and encephalitis viruses. Abstract..... 27
Virus, The, problem in transplantable tumors. Abstract..... 26

Waksman, Selman A. The nature of soil organic matter and the rôle of microorganisms in its formation and decomposition. Abstract..... 50
Water, Irregularities in the test for *B. coli* in..... 209
Weinzirl, John. Sugar as a source of the anaerobes causing explosion of chocolate candies..... 203
Werner, Marie, Dack, Gail M., and Starin, W. A. Study of the growth of *Cl. botulinum* and *Cl. sporogenes* in veal infusion broth under reduced pressures. Abstract..... 1
Whittier, E. O., and Rogers, L. A. Limiting factors in the lactic fermentation. Abstract..... 10
Williams, C. C., Cameron, E. J., and Thompson, R. J. Sources of thermophilic contamination in the canning of peas and corn. Abstract..... 64
Winslow, C. -E. A., and Brooke, Olive R. The viability of various species of bacteria in aqueous suspensions..... 235
——, and Shaughnessy, H. J. The effect of bacterial cells upon the chemical compositon of the surrounding menstruum as influenced by the presence of various electrolytes. Abstract..... 8
Wright, William H., and Harding, H. G. A modification of the Brown apparatus for the determination of colorimetric pH. Abstract..... 10
——, and McCoy, Elizabeth F. An adaptation of the Chambers microdissection apparatus for the isolation of single bacterial cells. Abstract..... 15
——, and Simington, Robert M. The grouping of different strains of *Pseudomonas radicicola* of Soja Max according to the bacteriostatic effect of the pararosanilin dyes. Abstract..... 54
——, and Thornton, H. R. How accurate is the quantitative plate count? Abstract..... 63

Zinsser, Hans. Problems of the bacteriologist in his relations to medicine and the public health..... 147
——, and Grinnell, Francis B. Studies of bacterial allergy with pneumococcus. Abstract..... 30
Zoond, A. The interpretation of changes in electrical resistance accompanying the death of cells. Abstract..... 9